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ABSTRACT

A study was conducted in the summer of 1975 to determine whether or not incoming freshmen at Central Florida Community College (CFCC) would be interested in a human sexuality course, and to assess this group's opinion of the human sexuality training it had received from parental, junior high school, and high school instruction. Questionnaires were distributed on a voluntary anonymous basis to 364 incoming CFCC freshmen. Of those approached, 344 (95%) volunteered to participate. This group comprised 40% of CFCC's 1975-76 first-time students. Data obtained were analyzed using the Chi-square test. Results of the study indicated that this group of students would be interested in a human sexuality course covering all aspects of human sexuality, excepting abortion, sterilization, and homosexuality. A subsample of persons over 20 years of age was drawn from the sample and their responses analyzed. Results were similar to those obtained for the total sample. The majority of respondents indicated that they felt their prior formal human sexuality education had been inadequate. It was recommended that CFCC offer a human sexuality course reflecting those areas in which students had expressed interest. Chi-square contingency tables are attached. (JDS)

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FRESHMAN COLLEGE STUDENTS' EXPRESSED INTERESTS IN A HUMAN SEXUALITY COURSE AND TWELVE RELATED TOPICS; AND THEIR EVALUATION OF PREVIOUS INSTRUCTION

by

Thomas L. Weaver

Central Florida Community College

A PRACTICUM PRESENTED TO NOVA UNIVERSITY
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
DEGREE OF DOCTOR OF EDUCATION

NOVA UNIVERSITY

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ABSTRACT OF PRACTICUM:
Freshman College Students' Expressed Interests
in a Human Sexuality Course and
Twelve Related Topics; and Their Evaluation
of Previous Instruction

Of those incoming Term I, 1975-76 CFCC freshman students asked to participate in this study, 95 percent agreed and were surveyed by questionnaire. The sample of 344 represented 40 percent of all CFCC freshman students. A significant difference existed between the number of students interested in a course in Human Sexuality and the number of those not interested. A significant difference existed also between the students interested in eight of twelve specific human sexuality topics and those not interested. A sub-study of freshman students aged 20 and over (n=88) found a significant difference between sub-sample students interested in a Human Sexuality course and those not interested. Sub-study students were interested significantly in eight of the twelve specific human sexuality topics. The total sample significantly evaluated previous human sexuality instruction received from each of three sources (parents, high schools, and middle or junior high schools) as "below average-very inadequate". The Chi Square procedure was used to test the 29 null hypotheses. The calculated value of x^2 exceeded the critical value of x^2 at the .001 level for 17 of the null hypotheses, at the .01 level for four, and at the .05 level for two. Thus, 23 of the 29 null hypotheses of this study were rejected and the alternative hypotheses accepted.

A STUDY OF

FRESHMAN COLLEGE STUDENTS' EXPRESSED INTERESTS

IN A HUMAN SEXUALITY COURSE AND

TWELVE RELATED TOPICS; AND THEIR EVALUATION

OF PREVIOUS INSTRUCTION

THE STATEMENT OF THE PROBLEMS

The twenty-nine problems studied in this research study included the following:

Problem 1. Is there a significant difference between the number of incoming Central Florida Community College freshman students interested in taking a hypothetically proposed course in Human Sexuality and the number of such students not interested in taking such a course?

Problem 2. Is there a significant difference between the number of incoming CFCC freshman students aged 20 and over interested in taking a hypothetically proposed course in Human Sexuality and the number of such students not interested in taking such a course?

Problem 3 - Problem 14. Is there a significant difference between the number of incoming CFCC freshman students interested in a study of each of the following human sexuality topics and the number of such students not interested in a study of each of these topics?

3. -- a very detailed presentation of the reproductive system of the human anatomy.

4. -- one's physiological sexual development and maturation.

5. -- physiological sexual stimulation and responsive behavioral differences in males and females.

6. -- sexual intercourse.

7. -- pregnancy and birth.

8. -- contraception.

9. -- abortion.

10. -- female sterilization.

11. -- male sterilization.

12. -- heterosexuality.

13. -- homosexuality.

14. -- venereal disease.

Problem 15 - Problem 26. Is there a significant difference between the number of incoming CFCC freshman students aged 20 and over interested in a study of each of the following human sexuality topics and the number of such students not interested in a study of each of these topics? --

15. -- a very detailed presentation of the reproductive system of the human anatomy.

16. -- one's physiological sexual development and maturation.

17. -- physiological sexual stimulation and responsive behavioral differences in males and females.

18. -- sexual intercourse.

19. -- pregnancy and birth.

20. -- contraception.

21. -- abortion.

22. -- female sterilization.

23. -- male sterilization.

24. -- heterosexuality.

25. -- homosexuality.

26. -- venereal disease.

Problem 27. Is there a significant difference between the number of incoming CFCC freshman students evaluating the human sexuality information given them by their parents as "below average-very inadequate" and the number of such students evaluating this information as "above average-excellent"?

Problem 28. Is there a significant difference between the number of incoming CFCC freshman students evaluating the human sexuality information given them in formal high school classroom instruction as "below average-very inadequate" and the number of such students evaluating this information as "above average-excellent"?

Problem 29. Is there a significant difference between the number of incoming CFCC freshman students evaluating the human sexuality information given them in formal middle school or junior high school classroom instruction as "below average-very inadequate" and the number of such students evaluating this information as "above average-excellent"?

HYPOTHESES

The problems studied in this research study tested the following hypotheses:

1. There is a significant difference between the number of incoming CFCC freshman students interested in taking a hypothetically proposed course in Human Sexuality and the number of such students not interested in taking such a course.

2. There is a significant difference between the number of CFCC freshman students aged 20 and over interested in taking a hypothetically proposed course in Human Sexuality and the number of such students not interested in taking such a course.

3. - 14. There is a significant difference between the number of incoming CFCC freshman students interested in a study of each of the following human sexuality topics and the number of such students not interested in a study of each of these topics --

3. -- a very detailed presentation of the reproductive system of the human anatomy.
4. -- one's physiological sexual development and maturation.
5. -- physiological sexual stimulation and responsive behavioral differences in males and females.
6. -- sexual intercourse.
7. -- pregnancy and birth.
8. -- contraception.
9. -- abortion.

10. -- female sterilization.

11. -- male sterilization.

12. -- heterosexuality.

13. -- homosexuality.

14. -- venereal disease.

15. - 26. There is a significant difference between the number of incoming CFCC freshman students aged 20 and over interested in a study of each of the following human sexuality topics and the number of such students not interested in a study of each of these topics --

15. -- a very detailed presentation of the reproductive system of the human anatomy.

16. -- one's physiological sexual development and maturation.

17. -- physiological sexual stimulation and responsive behavioral differences in males and females.

18. -- sexual intercourse.

19. -- pregnancy and birth.

20. -- contraception.

21. -- abortion.

22. -- female sterilization.

23. -- male sterilization.

24. -- heterosexuality.

25. -- homosexuality.

26. -- venereal disease.

27. There is a significant difference between the number of incoming CFCC freshman students evaluating the human sexuality information given them by their parents as "below average-very inadequate"

and the number of such students evaluating this information as "above average-excellent".

28. There is a significant difference between the number of incoming CFCC freshman students evaluating the human sexuality information given them in formal high school classroom instruction as "below average-very inadequate" and the number of such students evaluating this information as "above average-excellent".

29. There is a significant difference between the number of incoming CFCC freshman students evaluating the human sexuality information given them in formal middle school or junior high school classroom instruction as "below average-very inadequate" and the number of such students evaluating this information as "above average-excellent".

BACKGROUND AND SIGNIFICANCE OF THE STUDY

In September, 1975, Central Florida Community College's Institute for the Future sponsored a two-day conference, "Human Sexuality -- What it Means to All of Us", organized by Dr. William C. Butscher, Ocala pediatrician and Clinical Professor of Pediatrics in the College of Medicine at the University of Florida. The conference featured Dr. Mary S. Calderone, Executive Director of SIECUS, Sex Information and Education Council of the United States, as well as local panelists representing the Marion County Public Health Unit, the Florida Division of Youth Services, the Central Florida Community College Nursing Department, the Marion County School Board, the Marion-Citrus Mental Health Centers, and this author, representing Student Personnel Services at CFCC. As a panelist, this writer was asked to consider such questions as (1) what areas of human sexual needs are expressed by CFCC students; (2) is the college coping with student needs in human sexuality; and (3) should classes in human sexuality be offered by the college to the various types of its students--both credit and non-credit. To provide a foundation for replying to such questions, it was felt a research study in the expressed needs of entering Central Florida Community College students should be undertaken. Subsequently, a questionnaire was developed on this topic and administered on a voluntary, anonymous basis to incoming freshman students as part of their summer orientation program at the college.

A review of literature pertaining to the topic provided insight for such a research study. Many authorities have argued for the establishment of sex education courses in the various levels of education. Godenne (1974, p. 71) speaks for many in stating, "Parents should assume the responsibility of initiating the sexual education of their children at the time they reach biological sexual maturity..." However, Godenne points out, "The task of providing sexual information to adolescents and young people should be shared by teachers, physicians, educators, and parents. Jensen and Robbins (1975) indicate that in a recent study of 411 adolescents aged 13 19, 72 percent of the boys and 70 percent of the girls said that their parents do not talk freely about sex. In a recent talk, Calderone (1975) stressed the importance placed by herself and the Sex Information and Education Council of the United States on proper education in human sexuality for today's parents. Such education would enable parents to discuss, explain, and interpret human sexuality topics for their children more openly, honestly, and factually.

Factual knowledge of all aspects of one's human sexuality is stressed by many authorities as they relate the importance of such knowledge to a wide-range of human situations and problems. Masterson (1971, p. 5) notes that questions he received from high school students to whom he had spoken on sex "reveal an intense, urgent, and earnest quest for a realistic understanding of the role of sex in these young peoples' lives." Schimel (1971) stresses the importance of one's understanding of sexual topics to the development of one's self-esteem --

which he claims to be a more basic need than sexual activity itself. Renshaw (1975) vividly ties in sexuality with depression in infancy, childhood, and adolescence. Teicher (1974) recounts sexual experiences precipitating adolescent suicides. Arnstein (1971) and Teicher (1974) suggest that lack of reality-based human sexuality information leads many young people to fears of their possible homosexuality. Caplan and Black (1974, p. 8), after treating more than 100 couples with sexual problems in a three-year period, are convinced that "most sexual difficulties are related to unrealistic sexual expectations..." (which) "negatively influence sexual performance and thus interfere with the general quality of relationships." Caplan and Black (1974, p. 8) also state, "Ours is a sexually troubled society" and refer us to "Masters and Johnson's conservative estimate that 50 percent of marriages are troubled by significant sexual problems ranging from lack of meaning in the sexual aspect of the relationship to performance problems." Jensen and Robbins (1975), Caplan and Black (1974), Werner (1975), Arnstein (1971), and Calderone (1969) are among many authors and scientists who cite the fact that even in an age of highly skilled technology and educational advancements, a great majority of today's young people are erroneously caught up in believing many, many myths regarding human sexuality -- much to the disadvantage of these young people and their emotional well-being and development.

With such situations as briefly mentioned above, we consider Vincent's (1967, pp. 49-50) commentary:

"We cannot return to or recapture an 'age of innocence'

> regarding sex, if such an age ever existed. Yet those who argue against providing sex education for youth would appear to believe that an age of innocence still exists, and that we still have a choice between providing or not providing sex education. Such a choice no longer exists. All of us are literally innundated with information, ideas, and attitudes about sex via television, movies, newspapers, paperback books, magazines, and our peers. In view of the quantity of ideas and attitudes about sex readily available to youth, it is pointless to continue debating whether or not youth should receive sex education. They are! The crucial and reality question is: 'Are we satisfied with the quality, the content, the accuracy, and the value orientation of the ideas and attitudes about human sexuality which youth is now daily, if not hourly, receiving from current sources?'"

Does the foregoing have any significance for educators and students at an institution of higher education such as Central Florida Community College? Where do college students fit into this picture, if indeed they do? Calderone (1969, p. 189) would lead us to believe there <u>is</u> an importance for such human sexuality education at the college level, stating that lack of scientific information

> "about human sexual behavior permeates all segments of the population, and the college student population does not differ from the general adult population; both groups are pretty equal in ignorance about even such facts as we have about sexuality and sexual behavior, and both groups labor equally under beliefs and attitudes (although not always the same ones) about sexuality that are mythologically rather than logically based."

Arnstein (1971) states

> "Because the college period is frequently the time when young people are most actively engaged in sexual experimentation, it is not surprising that these years are often characterized by sexual confusion, indecision, and sometimes turmoil. College students tend to feel that 'maturity'--and with it sexual identity--must be established by the time of graduation. Any psychiatric clinic

> treating college students can expect to see many grappling with doubts and anxieties about their sexual natures."

Werner (1975, p. 35) works with college students at the Michigan State University Health Center and also authors a regular college newspaper column, "The Doctor's Bag", which appears in some fifty college newspapers. His column deals with health and personal concerns as asked by college students. Werner says that the contents of these questions "reveal that students are primarily concerned about sex but are also quite concerned about their body--its appearance and functioning. Though they are often distressed about particular conditions and situations, they express very few psychologic or emotional problems that they feel incapable of handling; they merely request information to deal with the source of the distress." Werner summarizes that of 1,000 letters received, 52 percent were sex-related questions and that 65 percent of these sex-related questions were about anatomy and physiology (female, 44%; contraception, 29%; male, 20%; and venereal disease, 7%) and that 35 percent of these sex-related questions were about sexual activity (sexual intercourse, 56%; oral and anal, 17%; petting, 14%; masturbation, 10%; and homosexuality, 2%). Werner states further,

> "The fact that 52% of the letters concerned sex is less important than the fact that 65% of the sex questions concerned biology and anatomy -- information readily available or that a young adult should have by college age."

Closely aligned, Godenne (1974, p. 71) states

> "Human sexual behavior should be explained in a clear objective way and it should not be assumed that because an adolescent is ready to enter college he is necessarily sexually sophisticated. Too many older adolescents and even adults have unanswered questions about sex and feel too ashamed of their ignorance to seek the information so badly needed."

Calderone (1969, p. 190), as many others, feels the importance of combining the biological with the psychological aspects of human sexuality and, also, to have students eventually deal with these topics in small group discussions. However, she believes that

> "freshmen coming into college laboring under sheer sexual ignorance and all the hangover mythologies inflicted on them by the adults in their backgrounds, would be better prepared for group discussion if they first went through a systematic course of didactically presented sound information about sex. More important, I believe that our present situation absolutely requires demonstrated willingness on the part of adults to provide just such sound information and answers to any sexual question whatsoever, as one of the best ways of establishing or re-establishing contact, to give young people some feeling that adults (even those over 30) are ready to level with them. . . I consider that institutions of higher learning must inescapably recognize their obligation on this count to the sexually immature, sexually confused, and sexually illiterate incoming freshman, an obligation that should lead the institution to construct and provide the kinds of learning and discussion experiences that will contribute to the emotional maturation of these young people, who find themselves so often in sexual situations with which they have never been prepared to cope."

Maxwell, (1972, p.118) indicates, "The need for sex education at the college and university level is revealed through recent research and studies that indicate a startling amount of incomplete

and distorted information and knowledge among the 7 million college students." In describing Vanderbilt University's Experimental Program on Human Sexuality which she helped develop, Maxwell reports that feedback from the student respondents indicated that information on anatomy, contraception, physiological aspects of male-female relationships, abortion, and venereal disease was "extremely meaningful". She reports further that approximately 50 percent of those students taking the program responded to a follow-up study one month after the experimental program's completion. All of these responding students indicated that the program should be offered again. The majority of these students evaluated the program as "valuable" on a continuum from "very valuable" to "of no value". Also, of those responding, 100 percent indicated that they would recommend the program to other students; 50 percent indicated that their feelings and/or attitudes changed as a result of their participation in the program; and 95 percent indicated that they had received new information from the program.

In its 1975-76 College Catalog, Central Florida Community College (1975, pp. 15-16) states, "Fundamental in the educational philosophy of the faculty...is the belief that development of the individual for a useful life in a democratic society is the chief duty and obligation of the public educational system. Hand in hand with this belief goes adherence to faith in the worth and dignity of the individual. These -- duty on one hand and faith on the other -- impel the faculty of the college to find appropriate programs and effective educational techniques to help each student discover his

abilities and interests and develop them to the fullest extent consonant with his own desires and capabilities." Five of the thirteen "objectives of the college...to help each individual" which follow the above statement of philosophy tie in with such a course in Human Sexuality. These include: to help each individual...become familiar with the accumulated knowledge of the world...understand his interaction with his biological and physical environment...maintain good mental and physical health... develop rewarding personal and social patterns of life...and... share in the development of a satisfying home and family life.

CFCC does not offer a course in Human Sexuality. A review of the course offerings of the 27 other Florida state-supported community colleges reveals that none of these colleges offers such a course.

Considering all of the above, it was felt that a research study should be made of the expressed feelings of incoming CFCC freshman students on the desirability of offering a college course in Human Sexuality and the expressed interests in specific human sexuality topics to be included in such a course---to concentrate on anatomical-biological aspects of human sexuality, as stressed in the literature. It was felt that the study should also seek such students' evaluations of human sexuality information given them by parents, formal high school classroom instruction, and formal middle school or junior high school classroom instruction. It was further felt that the study should develop figures on such students aged 20 and over--the years of parenthood-- in an effort to give support to or deny claims that institutions should be educating

parents in human sexuality in order for them to discuss better its topics with their children.

DEFINITION OF TERMS

The following terms were used in this research project:

1. CFCC. An abbreviation for Central Florida Community College.

2. Incoming CFCC freshman student. Any first-time college student entering a CFCC college credit program of any type, regardless of student classification (part- or full-time), sex, age, race, marital status, religion, or political orientation.

3. Incoming CFCC freshman student aged 20 and over. Same as #2 above, except that age is a consideration. (This term used only with Problem 2 and Problems 15-26.)

4. Questionnaire. A Leikert scale instrument used in obtaining data for the study. (See Appendix for copy of this questionnaire.)

5. Interested Student. Students answering 5 ("extremely interested")or 4 ("very interested") to questions posed by the questionnaire. (This term is used in Problems 1-26.)

6. Not Interested Student. Students answering 2 ("slightly interested") or 1 ("not interested at all") to questions posed by the research questionnaire. (This term is used in Problems 1-26.)

7. Below Average-Very Inadequate. Ratings of human sexuality information previously received by the students. All students answering 1 ("very inadequate") or 2 ("below average") to questions 2, 3, and 4 of Part II of the questionnaire. (This term is used in Problems 27-29.)

8. Above Average-Excellent. Ratings of human sexuality information previously received by the students. All students answering 5 ("excellent") or 4 ("above average") to questions 2, 3, and 4 of Part II of the questionnaire. (This term is used in Problems 27-29.)

LIMITATIONS OF THE STUDY

Possible limitations of this research study included the following:

1. The data for the study was to be derived from replies to a questionnaire administered on a voluntary, anonymous basis to approximately one-third of the incoming CFCC freshman students as part of their summer orientation sessions. Sixty of these orientation sessions were scheduled. Incoming freshman students in twenty of these sessions were asked to participate on a voluntary basis. Thus, no strict random sampling procedures were employed.

2. Inasmuch as participation was not mandatory, the sample size could have been small if few of the incoming students agreed to participate. A very small sampling would not have given a true picture of the freshman class overall. As it developed, however, 95 percent of those approached (n=344) agreed to participate, which proved to be 40 percent of the total incoming freshman students.

3. Even though the phrasing of the questionnaire's questions and its possible replies had been revised several times and reviewed by several other student personnel services professionals in an attempt to guard against ambiguity, confusion, and misunderstanding of terms, there was the possibility that some misinterpretation or differing interpretations could have occured, which could have limited the overall information obtained.

4. Although the intent of much of this study was to determine the importance of various biological topics of interest as expressed

by students, it could be considered a limitation of the study in that vitally important psychological and value-oriented aspects of human sexuality were not covered by the questionnaire or in the research project.

5. The research was not concerned with the variables of one's sex, religion, marital status, or political orientation. Possibly any of these factors could have affected whether some students would voluntarily participate in the study or how they might have responded once they did volunteer.

BASIC ASSUMPTIONS

The primary basic assumption relative to this study was that CFCC students are not far different from college students described in the literature by researchers such as Werner (1975), Maxwell (1972), Arnstein (1971), Calderone (1969), Godenne (1974), Jensen and Robbins (1975), who describe college students as uninformed, seeking answers, and caught up in sexual mythologies even in an enlightened age of technology and education. Consequently, it was assumed that CFCC students would express many of the same needs for basic biologically-based human sexuality information as have those described in the literature.

It was assumed also that presented with the hypothetically proposed course in Human Sexuality, a significant number of these incoming freshman students would express interest in such a course, as did Vanderbilt students discussed by Maxwell (1972).

It was assumed that incoming CFCC students aged 20 and over---those in prime ages of parenthood---would express as much or more interest in the hypothetically proposed course in Human Sexuality and twelve selected topics as did the general sample surveyed, which SEICUS' Executive Director Calderone (1975) and Caplan and Black (1974) lead us to believe.

It was assumed that the majority of the students approached would participate by completing the questionnaire inasmuch as it was administered on a voluntary, anonymous basis, was short, and did not appear to be too difficult or time consuming to complete---and that students would appear willing to express their questions and concerns

and would be desirous of receiving answers, as reported by Werner (1975).

Finally, it was assumed that information about human sexuality received by these students from three possible previous sources (parents, high school classroom instruction, and middle or junior high school classroom instruction) would be rated low by a significant number of students, as indicated by researchers such as Godenne (1974), Calderone (1969, 1975), Teicher (1974) and Caplan and Black (1974).

PROCEDURES FOR COLLECTING THE DATA

Questionnaires were distributed on a voluntary, anonymous basis to 364 incoming CFCC college freshman students who were on campus for orientation and advisement purposes. These students were participants in one-third (twenty) of the sixty orientation sessions scheduled during the summer of 1975. All students were informed that a research project was being undertaken, that their participation would be appreciated, and that participation was both voluntary and anonymous. Of the 364 students approached, 344 (95%) volunteered to participate, which proved to be 40 percent of CFCC's 860 Term I, 1975-76 incoming first-time college students.

The makeup of this sample of 344 volunteers was as follows:

Sex

Male.....160
Female.....184

Total.....344

Age

19 and under.....256

20 and over

20-29..... 63
30-39..... 20
40-49..... 5

Total Aged 20 and over.....88

Total.....344

PROCEDURES FOR TREATING THE DATA

Data derived from respondents' replies to the questionnaire did not consider one's student classification (full- or part-time), sex, race, marital status, religion, or political orientation. Age was not considered except as was necessary for the sub-study concerning respondents aged 20 and over, the years of parenthood (Problem 2 and Problems 15-26). Information supplied by students aged 20 and over was separated for the sub-study only; all respondents' replies were included in all other sections of the research.

Prior to analyzing the data for research questions 1-26, "Interested" and "Not Interested" student groups were compiled from the questionnaire for each question. Those students answering 5 ("extremely interested") and 4 ("very interested") were categorized as "Interested". Those answering 2 ("slightly interested") and 1 ("not interested at all") were categorized as "Not Interested" students for this study. Similarly, for research questions 27-29, ratings were established by categorizing all 1 ("very inadequate") and 2 ("below average") responses as "Below Average-Very Inadequate". All 5 ("excellent") and 4 ("above average") responses were categorized as "Excellent-Above Average". No middle (#3) responses were considered in the development of any these categories for testing any of the twenty-nine hypotheses.

Tables I and II below show the totals for these various categories.

TABLE I

INTERESTED AND NOT INTERESTED CATEGORIES

FOR USE IN RESEARCH QUESTIONS 1-26

Question #	Interested	Not Interested	Total
1	109	74	183
2	39	17	56
3	123	82	205
4	150	62	212
5	175	53	228
6	134	83	217
7	189	65	254
8	147	93	240
9	137	123	260
10	119	125	244
11	117	117	234
12	127	93	220
13	64	192	256
14	160	72	232
15	43	17	60
16	51	11	62
17	55	8	63
18	46	14	60
19	49	19	68
20	40	24	64
21	34	32	66
22	35	30	65
23	32	27	59
24	38	17	55
25	21	42	63
26	48	19	67

TABLE II

"BELOW AVERAGE-VERY INADEQUATE" AND

"ABOVE AVERAGE-EXCELLENT" CATEGORIES

FOR USE IN RESEARCH QUESTIONS 27-29

Question #	"Below Average-Very Inadequate"	"Above Average-Excellent"	Total
27	151	46	197
28	199	53	252
29	261	14	275

Having thus totalled the various categories, the Chi Square procedure was employed to test the twenty-nine null hypotheses. If the calculated value of x^2 exceeded the critical value of x^2 at the .05 level of significance for any of these null hypotheses, the null hypothesis was rejected and the alternative hypothesis accepted. The Chi Square formula used in the study is

$$x^2 = \sum \left[\frac{(f_o - f_e)^2}{f_e} \right]$$

Chi Square Contingency Tables for testing null hypotheses 1-26 were set up as follows: (Koenker, 1961, p.105) *

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)			
EXPECTED (f_e)			

Chi Square Contingency Tables for testing null hypotheses 27-29 were set up as follows: *

	BELOW AVERAGE-VERY INADEQUATE	ABOVE AVERAGE-EXCELLENT	TOTAL
OBSERVED (f_o)			
EXPECTED (f_e)			

* Actual Tables are found in Appendix to this report.

The degrees of freedom for all of the Chi Square computations was calculated as follows:

$$df = (r - 1)(c - 1)$$

$$df = (1)(1)$$

$$df = 1$$

In establishing the critical x^2 value, it was found that by referring to a table of critical values of Chi Square, that for one degree of freedom the critical x^2 value at $\alpha = .05$ is 3.84. Therefore, reject H_o and accept H_a for each question if x^2 is > 3.84.

The twenty-nine null hypotheses tested in this research study were:

1. The bases of classification are independent; or the difference between the proportion of incoming CFCC freshman students interested in taking a hypothetically proposed course in Human Sexuality and the proportion of incoming CFCC freshman students not interested in such a course is zero.

$$H_o : \pi_1 = \pi_2$$

$$H_a : \pi_1 \neq \pi_2$$

2. The bases of classification are independent; or the difference between the proportion of incoming CFCC freshman students aged 20 and over interested in taking a hypothetically proposed course in Human Sexuality and the proportion of such students not interested in such a course is zero.

$$H_o : \pi_1 = \pi_2$$

$$H_a : \pi_1 \neq \pi_2$$

3 - 14. The bases of classification are independent; or the difference between the proportion of incoming CFCC freshman students interested in a study of each of the following human sexuality topics and the number of such students not interested in a study of each of these topics is zero.

$$H_o : \pi_1 = \pi_2$$

$$H_a : \pi_1 \neq \pi_2$$

3. -- a very detailed presentation of the reproductive

system of the human anatomy.

4. -- one's physiological sexual development and maturation.

5. -- physiological sexual stimulation and responsive behavioral differences in males and females.

6. -- sexual intercourse.

7. -- pregnancy and birth.

8. -- contraception.

9. -- abortion.

10. -- female sterilization.

11. -- male sterilization.

12. -- heterosexuality.

13. -- homosexuality.

14. -- venereal disease.

15 - 26. The bases of classification are independent; or the difference between the proportion of incoming CFCC freshman students aged 20 and over interested in a study of each of the following human sexuality topics and the number of such students not interested in a study of each of these topics is zero.

$H_o : \pi_1 = \pi_2$

$H_a : \pi_1 \neq \pi_2$

15. -- a very detailed presentation of the reproductive system of the human anatomy.

16. -- one's physiological sexual development and maturation.

17. -- physiological sexual stimulation and responsive behavioral differences in males and females.

18. -- sexual intercourse.

19. -- pregnancy and birth.

20. -- contraception.

21. -- abortion.

22. -- female sterilization.

23. -- male sterilization.

24. -- heterosexuality.

25. -- homosexuality.

26. -- venereal disease.

27. The bases of classification are independent; or the difference between the proportion of incoming CFCC freshman students evaluating the human sexuality information given them by their parents as "below average-very inadequate" and the number of such students evaluating this information as "above average-excellent" is zero.

$$H_o : \pi_1 = \pi_2$$

$$H_a : \pi_1 \neq \pi_2$$

28. The bases of classification are independent; or the difference between the proportion of incoming CFCC freshman students evaluating the human sexuality information given them in formal high school classroom instruction as "below average-very inadequate" and the number of such students evaluating this information as "above average-excellent" is zero.

$$H_o : \pi_1 = \pi_2$$

$$H_a : \pi_1 \neq \pi_2$$

29. The bases of classification are independent; or the difference between the proportion of incoming CFCC freshman students evaluating the human sexuality information given them in formal middle school or junior high school classroom instruction as "below average-very inadequate" and the number of such students evaluating this information as "above average-excellent" is zero.

$$H_o : \pi_1 = \pi_2$$

$$H_a : \pi_1 \neq \pi_2$$

RESULTS

Ninety-four percent of the 364 incoming CFCC freshman students who were asked to participate in this study volunteered to complete the questionnaire, making a total of 344 respondents. This number represented 40 percent of CFCC's incoming 1975-76 Term I freshman students--ten percent more than was hoped for when developing the research proposal. There were 160 male and 184 female respondents. Twenty-three percent of the total respondents (88 students) were aged 20 and over. Replies from these 88 students were separated for the special study of those students in the ages of parenthood (hypotheses 2 and 15-26).

Data Resulting From the Study

Using raw data from the questionnaire replies, Contingency Tables of Observed and Expected Frequencies were developed for each of the 29 null hypotheses. The Chi Square statistical test, with one degree of freedom, then was employed to test the significance of the difference between the two sample proportions for each null hypothesis. (All Contingency Tables and Chi Square calculations for the 29 null hypotheses are found in the Appendix to this report.)

Data derived for each of the null hypotheses is presented below.

Null Hypothesis 1. As recapped in Table III, the calculated value of Chi Square for H_o 1 was 6.70, which was found to be

significant at the .01 level. Since the calculated value of x^2 exceeded the critical value of x^2, the null hypothesis was rejected and the alternative hypothesis was accepted; incoming CFCC freshman students are interested in taking a course in Human Sexuality.

Null Hypothesis 2. As shown in Table III, the calculated value of Chi Square for H_o2 was 8.64, which was found to be significant at the .01 level. Since the calculated value of x^2 exceeded the critical value of x^2, the null hypothesis was rejected and the alternative hypothesis was accepted; incoming CFCC freshman students aged 20 and over are interested in taking a course in Human Sexuality.

TABLE III

INCOMING CFCC FRESHMAN STUDENTS' INTEREST AND NON-INTEREST IN A HUMAN SEXUALITY COURSE

AGE GROUP	INTERESTED STUDENTS	NOT INTERESTED STUDENTS	TOTAL	CALCULATED VALUE OF CHI SQUARE
All ages	109	74	183	6.70 *
Aged 20 and over	39	17	56	8.64 *

* Significant at .01 Level

Null Hypothesis 3. As shown in Table IV, the calculated value of Chi Square for H_o3 was 8.2, which was found to be significant at the .01 level. Since the calculated value of x^2 exceeded the critical value of x^2, the null hypothesis was rejected and the alternative hypothesis was accepted; incoming CFCC freshman students are interested in a detailed presentation of the reproductive system

of the human anatomy.

Null Hypothesis 4. As shown in Table IV, the calculated value of Chi Square for H_o4 was 36.52, which was found to be significant at the .001 level. Since the calculated value of x^2 exceeded the critical value of x^2, the null hypothesis was rejected and the alternative hypothesis was accepted; incoming CFCC freshman students are interested in a study of one's physiological sexual development and maturation.

Null Hypothesis 5. As shown in Table IV, the calculated value of Chi Square for H_o5 was 65.28, which was found to be significant at the .001 level. Since the calculated value of x^2 exceeded the critical value of x^2, the null hypothesis was rejected and the alternative hypothesis was accepted; incoming CFCC freshman students are interested in a study of physiological sexual stimulation and responsive behavioral differences in males and females.

Null Hypothesis 6. As shown in Table IV, the calculated value of Chi Square for H_o6 was 11.98, which was found to be significant at the .001 level. Since the calculated value of x^2 exceeded the critical value of x^2, the null hypothesis was rejected and the alternative hypothesis was accepted; incoming CFCC freshman students are interested in a study of sexual intercourse.

Null Hypothesis 7. As shown in Table IV, the calculated value of Chi Square for H_o7 was 60.54, which was found to be significant at the .001 level. Since the calculated value of x^2 exceeded the critical value of x^2, the null hypothesis was rejected and the alternative hypothesis was accepted; incoming CFCC freshman students are interested in a study of pregnancy and birth.

Null Hypothesis 8. As shown in Table IV, the calculated value of Chi Square for H_o8 was 12.16, which was found to be significant at the .001 level. Since the calculated value of x^2 exceeded the critical value of x^2, the null hypothesis was rejected and the alternative hypothesis was accepted; incoming CFCC freshman students are interested in a study of contraception.

Null Hypothesis 9. As shown in Table IV, the calculated value of Chi Square for H_o9 was 0.76. Since the calculated value of x^2 did not exceed the critical value of x^2, the null hypothesis could not be rejected; there is no significant difference between the proportion of incoming CFCC freshman students interested in a study of abortion and the number of such students not interested in a study of abortion.

Null Hypothesis 10. As shown in Table IV, the calculated value of Chi Square for H_o10 was 0.14. Since the calculated value of x^2 did not exceed the critical value of x^2, the null hypothesis could not be rejected; there is no significant difference between the proportion of incoming CFCC freshman students interested in a study of female sterilization and the number of such students not interested in a study of female sterilization.

Null Hypothesis 11. As shown in Table IV, the calculated value of Chi Square for H_o11 was 0.00. Since the calculated value of x^2 did not exceed the critical value of x^2, the null hypothesis could not be rejected; there is no significant difference between the proportion of incoming CFCC freshman students interested in a study of male sterilization and the number of such students not interested in a study of male sterilization.

Null Hypothesis 12. As shown in Table IV, the calculated value of Chi Square for H_o12 was 5.26, which was found to be significant at the .05 level. Since the calculated value of x^2 exceeded the critical value of x^2, the null hypothesis was rejected and the alternative hypothesis was accepted; incoming CFCC freshman students are interested in a study of heterosexuality.

Null Hypothesis 13. As shown in Table IV, the calculated value of Chi Square for H_o13 was 64.0, which was found to be significant at the .001 level--but in the direction of the "not interested" replies.

Since the calculated value of x^2 exceeded the critical value of x^2, the null hypothesis was rejected and the alternative hypothesis accepted; there is a significant difference between the proportion of incoming CFCC freshman students interested in a study of homosexuality and the number of such students not interested in a study of homosexuality--the proportion of such students not interested is significantly greater than those interested.

Null Hypothesis 14. As shown in Table IV, the calculated value of Chi Square for H_o14 was 33.38, which was found to be significant at the .001 level. Since the calculated value of x^2 exceeded the critical value of x^2, the null hypothesis was rejected and the alternative hypothesis was accepted; incoming CFCC freshman students are interested in a study of venereal disease.

TABLE IV

INCOMING CFCC FRESHMAN STUDENTS' INTEREST AND NON-INTEREST IN TWELVE SPECIFIC HUMAN SEXUALITY TOPICS
(Listed by Hypothesis Number)

(All Ages Surveyed)

HUMAN SEXUALITY TOPIC	INTERESTED STUDENTS	NOT INTERESTED STUDENTS	TOTAL STUDENTS	x^2
3. Detailed presentation of the reproductive system of the human anatomy	123	82	205	8.2 **
4. Physiological sexual development and maturation	150	62	212	36.52 ***
5. Physiological sexual stimulation and responsive behavioral differences in males and females	175	53	228	65.28 ***
6. Sexual intercourse	134	83	217	11.98 ***
7. Pregnancy and birth	189	65	254	60.54 ***
8. Contraception	147	93	240	12.16 ***
9. Abortion	137	123	260	0.76
10. Female sterilization	119	125	244	0.14
11. Male sterilization	117	117	134	0.00
12. Heterosexuality	127	93	220	5.26 *
13. Homosexuality	64	192	256	64.00 ***
14. Venereal disease	160	72	232	33.38 ***

* Significant at .05 Level

** Significant at .01 Level

*** Significant at .001 Level

***+ Significant at .001 Level, but in "not interested" direction rather than "interested"

Null Hypothesis 15. As shown in Table V, the calculated value of Chi Square for H_o15 was 11.26, which was found to be significant at the .001 level. Since the calculated value of x^2 exceeded the critical value of x^2, the null hypothesis was rejected and the alternative hypothesis was accepted; incoming CFCC freshman students aged 20 and over are interested in a detailed presentation of the reproductive system of the human anatomy.

Null Hypothesis 16. As shown in Table V, the calculated value of Chi Square for H_o16 was 25.8, which was found to be significant at the .001 level. Since the calculated value of x^2 exceeded the critical value of x^2, the null hypothesis was rejected and the alternative hypothesis was accepted; incoming CFCC freshman students aged 20 and over are interested in a study of one's physiological sexual development and maturation.

Null Hypothesis 17. As shown in Table V, the calculated value of Chi Square for H_o17 was 35.06, which was found to be significant at the .001 level. Since the calculated value of x^2 exceeded the critical value of x^2, the null hypothesis was rejected and the alternative hypothesis was accepted; incoming CFCC freshman students aged 20 and over are interested in a study of physiological sexual stimulation and responsive behavioral differences in males and females.

Null Hypothesis 18. As shown in Table V, the calculated value of Chi Square for H_o18 was 17.06, which was found to be significant

at the .001 level. Since the calculated value of x^2 exceeded the critical value of x^2, the null hypothesis was rejected and the alternative hypothesis was accepted; incoming CFCC freshman students aged 20 and over are interested in a study of sexual intercourse.

Null Hypothesis 19. As shown in Table V, the calculated value of Chi Square for H_o19 was 13.24, which was found to be significant at the .001 level. Since the calculated value of x^2 exceeded the critical value of x^2, the null hypothesis was rejected and the alternative hypothesis was accepted; incoming CFCC freshman students aged 20 and over are interested in a study of pregnancy and birth.

Null Hypothesis 20. As shown in Table V, the calculated value of Chi Square for H_o20 was 4.0, which was found to be significant at the .05 level. Since the calculated value of x^2 exceeded the critical value of x^2, the null hypothesis was rejected and the alternative hypothesis was accepted; incoming CFCC freshman students aged 20 and over are interested in a study of contraception.

Null Hypothesis 21. As shown in Table V, the calculated value of Chi Square for H_o21 was 0.06. Since the calculated value of x^2 did not exceed the critical value of x^2, the null hypothesis could not be rejected; there is no significant difference between the proportion of incoming CFCC freshman students aged 20 and over interested in a study of abortion and the number of such students

not interested in a study of abortion.

Null Hypothesis 22. As shown in Table V, the calculated value of Chi Square for H_o22 was 0.38. Since the calculated value of x^2 did not exceed the critical value of x^2, the null hypothesis could not be rejected; there is no significant difference between the proportion of incoming CFCC freshman students aged 20 and over interested in a study of female sterilization and the number of such students not interested in a study of female sterilization.

Null Hypothesis 23. As shown in Table V, the calculated value of Chi Square for H_o23 was 0.42. Since the calculated value of x^2 did not exceed the critical value of x^2, the null hypothesis could not be rejected; there is no significant difference between the proportion of incoming CFCC freshman students aged 20 and over interested in a study of male sterilization and the number of such students not interested in a study of male sterilization.

Null Hypothesis 24. As shown in Table V, the calculated value of Chi Square for H_o24 was 8.02, which was found to be significant at the .01 level. Since the calculated value of x^2 exceeded the critical value of x^2, the null hypothesis was rejected and the alternative hypothesis was accepted; incoming CFCC freshman students aged 20 and over are interested in a study of heterosexuality.

Null Hypothesis 25. As shown in Table V, the calculated value of Chi Square for H_o25 was 7.00, which was found to be significant at the .01 level--but in the direction of the "not interested" replies. Since the calculated value of x^2 exceeded the critical value of x^2, the null hypothesis was rejected and the alternative hypothesis was accepted; there is a significant difference between the proportion of incoming CFCC freshman students aged 20 and over interested in a study of homosexuality and the number of such students not interested in a study of homosexuality--the proportion of such students not interested is significantly greater than those interested.

Null Hypothesis 26. As shown in Table V, the calculated value of Chi Square for H_o26 was 12.56, which was found to be significant at the .001 level. Since the calculated value of x^2 exceeded the critical value of x^2, the null hypothesis was rejected and the alternative hypothesis was accepted; incoming CFCC freshman students aged 20 and over are interested in a study of venereal disease.

TABLE V

INCOMING CFCC FRESHMAN STUDENTS' INTEREST AND NON-INTEREST IN TWELVE SPECIFIC HUMAN SEXUALITY TOPICS
(Listed by Hypothesis Number)

(Aged 20 and Over)

HUMAN SEXUALITY TOPIC	INTERESTED STUDENTS	NOT INTERESTED STUDENTS	TOTAL STUDENTS	x^2
15. Detailed presentation of the reproductive system of the human anatomy	43	17	60	11.26 ***
16. Physiological sexual development and maturation	51	11	62	25.8 ***
17. Physiological sexual stimulation and responsive behavioral differences in males and females	55	8	63	35.06 ***
18. Sexual intercourse	46	14	60	17.06 ***
19. Pregnancy and birth	49	19	68	13.24 ***
20. Contraception	40	24	64	4.00 *
21. Abortion	34	32	66	0.06
22. Female sterilization	35	30	65	0.38
23. Male sterilization	32	27	59	0.42
24. Heterosexuality	38	17	55	8.02 **
25. Homosexuality	21	42	63	7.00 **+
26. Venereal disease	48	19	67	12.56 ***

* Significant at .05 Level

** Significant at .01 Level

*** Significant at .001 Level

**+ Significant at .01 Level, but in "not interested" direction rather than "interested"

Null Hypothesis 27. As shown in Table VI, the calculated value of Chi Square for H_o27 was 55.96, which was found to be significant at the .001 level. Since the calculated value of x^2 exceeded the critical value of x^2, the null hypothesis was rejected and the alternative hypothesis was accepted; incoming CFCC freshman students evaluate the human sexuality information given them by their parents as "below average-very inadequate."

Null Hypothesis 28. As shown in Table VI, the calculated value of Chi Square for H_o28 was 84.58, which was found to be significant at the .001 level. Since the calculated value of x^2 exceeded the critical value of x^2, the null hypothesis was rejected and the alternative hypothesis was accepted; incoming CFCC freshman students evaluate the human sexuality information given them in formal high school classroom instruction as "below average-very inadequate".

Null Hypothesis 29. As shown in Table VI, the calculated value of Chi Square for H_o29 was 221.86, which was found to be significant at the .001 level. Since the calculated value of x^2 exceeded the critical value of x^2, the null hypothesis was rejected and the alternative hypothesis was accepted; incoming CFCC freshman students evaluate the human sexuality information given them in formal middle school or junior high school classroom instruction as "below average-very inadequate".

TABLE VI

INCOMING CFCC FRESHMAN STUDENTS' EVALUATIONS OF PREVIOUS HUMAN SEXUALITY INSTRUCTION FROM THREE SOURCES

(All Ages Surveyed)

SOURCE OF PREVIOUS INSTRUCTION	RATED BELOW AVERAGE-VERY INADEQUATE	RATED ABOVE AVERAGE-EXCELLENT	TOTAL STUDENTS	x^2
Parents	151	46	197	55.96 ***
Formal High School Classroom Instruction	199	53	252	84.58 ***
Formal Middle or Junior High School Classroom Instruction	261	14	275	221.86 ***

*** Significant at .001 Level

Other Data

Percentage figures also were computed for the study, using raw data from the questionnaire responses. Percentage figures were determined for each of the following: (1) incoming CFCC freshman students' interest and non-interest in a human sexuality course--all ages surveyed; (2) interest and non-interest in a human sexuality course--students aged 20 and over; (3) students' interest and non-interest in each of the twelve specific human sexuality topics presented in the questionnaire--all ages survyed; (4) students' interest and non-interest in each of the twelve specific human sexuality topics--students aged 20 and over; and (5) students' evaluations of previous human sexuality instruction given them by parents, high school, and middle or junior high school--all ages surveyed. It should be noted that no middle (#3) responses were considered in any of the data for this study; however percentage figures for these middle responses were included for comparison purposes and as an aid in the interpretation of percentage totals.

Table VII, on page 46, shows percentage summaries of students' interest and non-interest in a course in Human Sexuality. Figure 1, which follows the table, presents this information graphically.

TABLE VII

INCOMING CFCC FRESHMAN STUDENTS' INTEREST AND NON-INTEREST IN A HUMAN SEXUALITY COURSE

Percentage Summary

AGE GROUP	STUDENTS WITH MIDDLE INTEREST (Not Used in Study)		INTERESTED STUDENTS		NOT INTERESTED STUDENTS	
	n	Percent of Total	n	Percent of Total	n	Percent of Total
All Ages (n=344)	161	47%	109	32%	74	22%
Aged 20 & Over (n=88)	32	36%	39	44%	17	19%

FIGURE 1

INCOMING CFCC FRESHMAN STUDENTS' INTEREST AND NON-INTEREST IN A HUMAN SEXUALITY COURSE

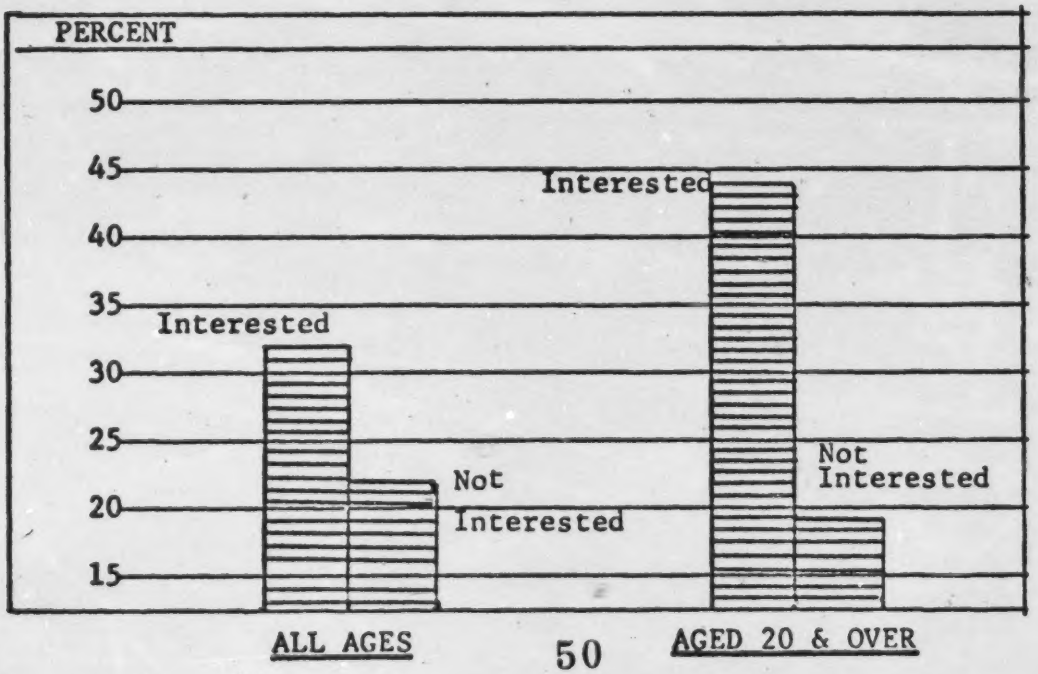


Table VIII on page 48 reflects the total sample of 344 students and gives percentage figures for incoming CFCC freshman students' interest and non-interest in each of the twelve human sexuality topics presented in the questionnaire. The topics are listed in rank order based on the interested students' responses.

Figure 2 on page 49 graphically shows the percentages of students interested and not interested in each of the twelve human sexuality topics.

Table VIII

INCOMING CFCC FRESHMAN STUDENTS' INTEREST AND NON-INTEREST IN TWELVE SPECIFIC HUMAN SEXUALITY TOPICS

Percentage Summary

(Rank Ordered)

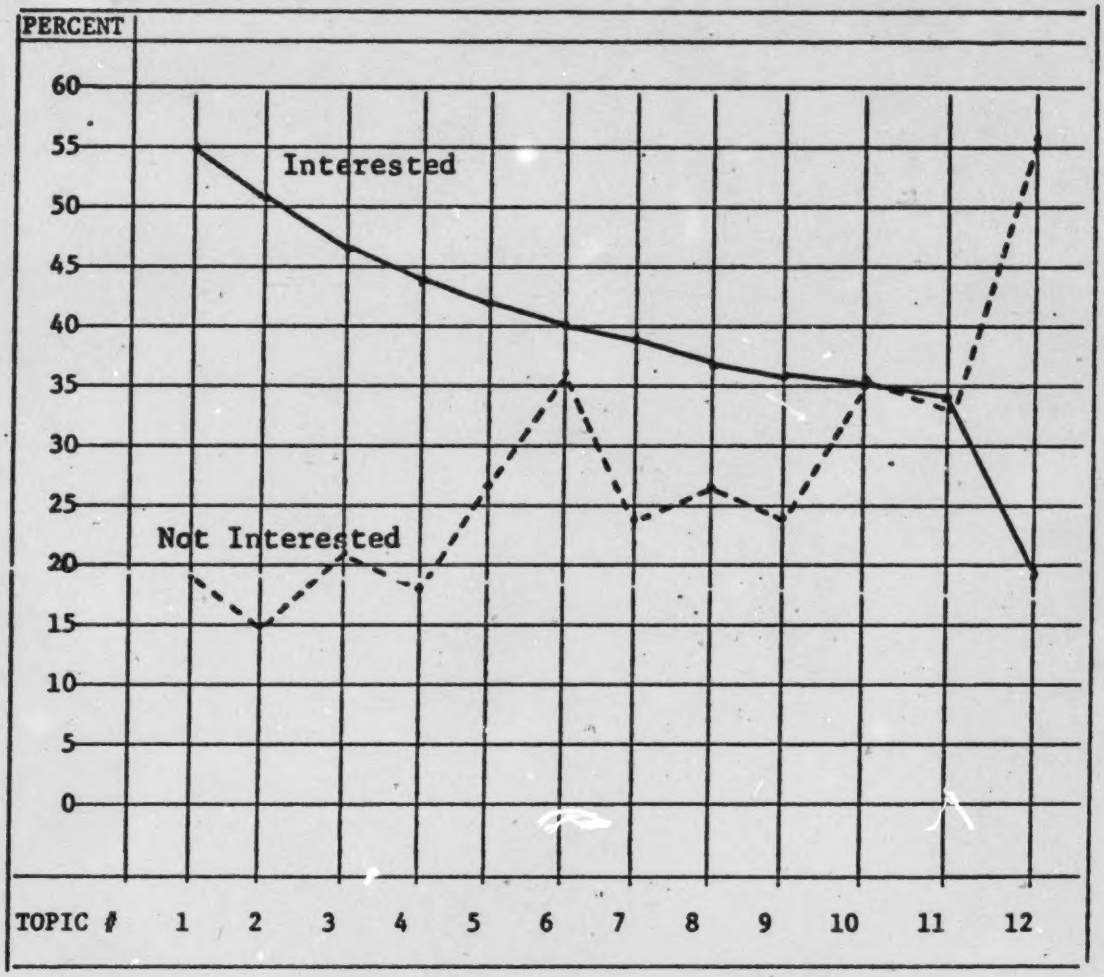
(All Ages Surveyed)
(n=344)

TOPIC	STUDENTS WITH MIDDLE INTEREST (Not Used in Study)		INTERESTED STUDENTS		NOT INTERESTED STUDENTS	
	n	Percent of Total	n	Percent of Total	n	Percent of Total
1. Pregnancy & birth	90	26%	189	55%	65	19%
2. Physiological sexual stimulation & responsive behavioral differences in males, females	116	34%	175	51%	53	15%
3. Venereal disease	112	32%	160	47%	72	21%
4. Physiological sexual development & maturation	132	38%	150	44%	62	18%
5. Contraception	104	30%	147	43%	93	27%
6. Abortion	84	24%	137	40%	123	36%
7. Sexual intercourse	127	37%	134	39%	83	24%
8. Heterosexuality	124	36%	127	37%	93	27%
9. A detailed presentation of the reproductive system of human anatomy	139	40%	123	36%	82	24%
10. Female sterilization	100	29%	119	35%	125	36%
11. Male sterilization	110	32%	117	34%	117	34%
12. Homosexuality	88	25%	64	19%	192	56%

Figure 2

INCOMING CFCC FRESHMAN STUDENTS'
INTEREST AND NON-INTEREST IN
TWELVE SPECIFIC HUMAN SEXUALITY TOPICS

(All Ages Surveyed)



TOPIC # 1: Pregnancy and birth
2: Physiological sexual stimulation & responsive behavioral differences in males and females
3: Venereal disease
4: Physiological sexual development and maturation
5: Contraception
6: Abortion
7: Sexual intercourse
8: Heterosexuality
9: Detailed presentation of reproductive system of human anatomy
10: Female sterilization
11: Male sterilization
12: Homosexuality

Percentage figures for students aged 20 and over reflecting interest and non-interest in each of the twelve human sexuality topics are found in Table IX on page 51. The human sexuality topics appear in rank order based on interested students' responses. Figure 3 on page 52 presents this information in graphic form.

Figure 4 on page 53 graphically compares percentages of the total sample group interested in each of the twelve human sexuality topics with the percentages of the sub-sample of students aged 20 and over interested in each of the topics.

Figure 5 on page 54 graphically compares percentages of the total sample group not interested in each of the twelve human sexuality topics with the percentages of the sub-sample of students aged 20 and over not interested in each of the topics.

Table IX

INCOMING CFCC FRESHMAN STUDENTS' INTEREST AND NON-INTEREST IN TWELVE SPECIFIC HUMAN SEXUALITY TOPICS

Percentage Summary

(Rank Ordered)

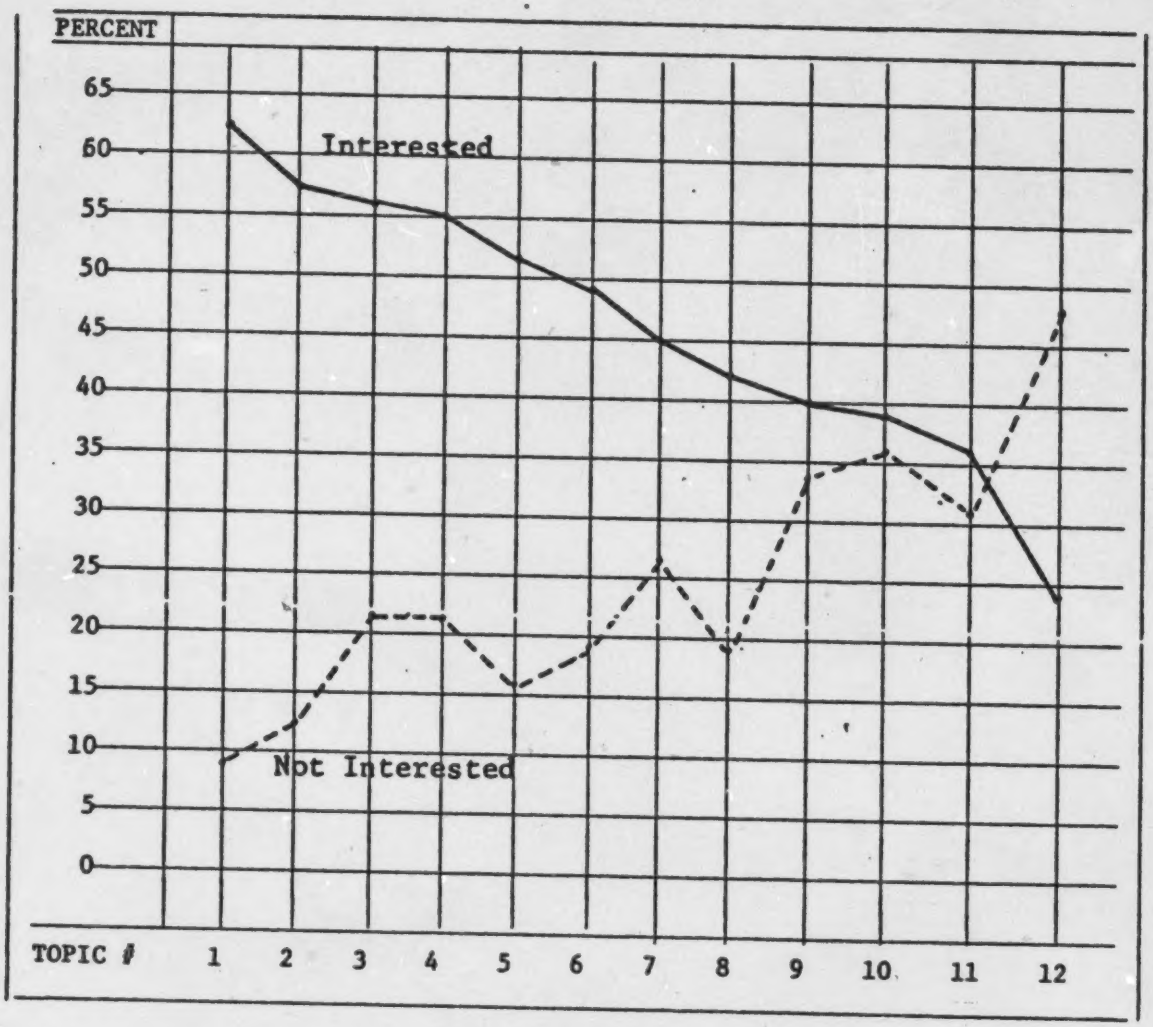
(Students Aged 20 and Over)
(n=88)

TOPIC	STUDENTS WITH MIDDLE INTEREST (Not Used in Study)		INTERESTED STUDENTS		NOT INTERESTED STUDENTS	
	n	Percent of Total	n	Percent of Total	n	Percent of Total
1. Physiological sexual stimulation & responsive behavioral differences in males, females	25	28%	55	63%	8	9%
2. Physiological sexual development & maturation	26	29%	51	58%	11	13%
3. Pregnancy & birth	20	22%	49	56%	19	22%
4. Venereal disease	21	23%	48	55%	19	22%
5. Sexual intercourse	28	32%	46	52%	14	16%
6. A detailed presentation of the reproductive system of human anatomy	28	32%	43	49%	17	19%
7. Contraception	24	28%	40	45%	24	27%
8. Heterosexuality	33	38%	38	43%	17	19%
9. Female sterilization	23	26%	35	40%	30	34%
10. Abortion	22	25%	34	39%	32	36%
11. Male sterilization	29	33%	32	36%	27	31%
12. Homosexuality	25	28%	21	24%	42	48%

Figure 3

INCOMING CFCC FRESHMAN STUDENTS'
INTEREST AND NON-INTEREST IN
TWELVE SPECIFIC HUMAN SEXUALITY TOPICS

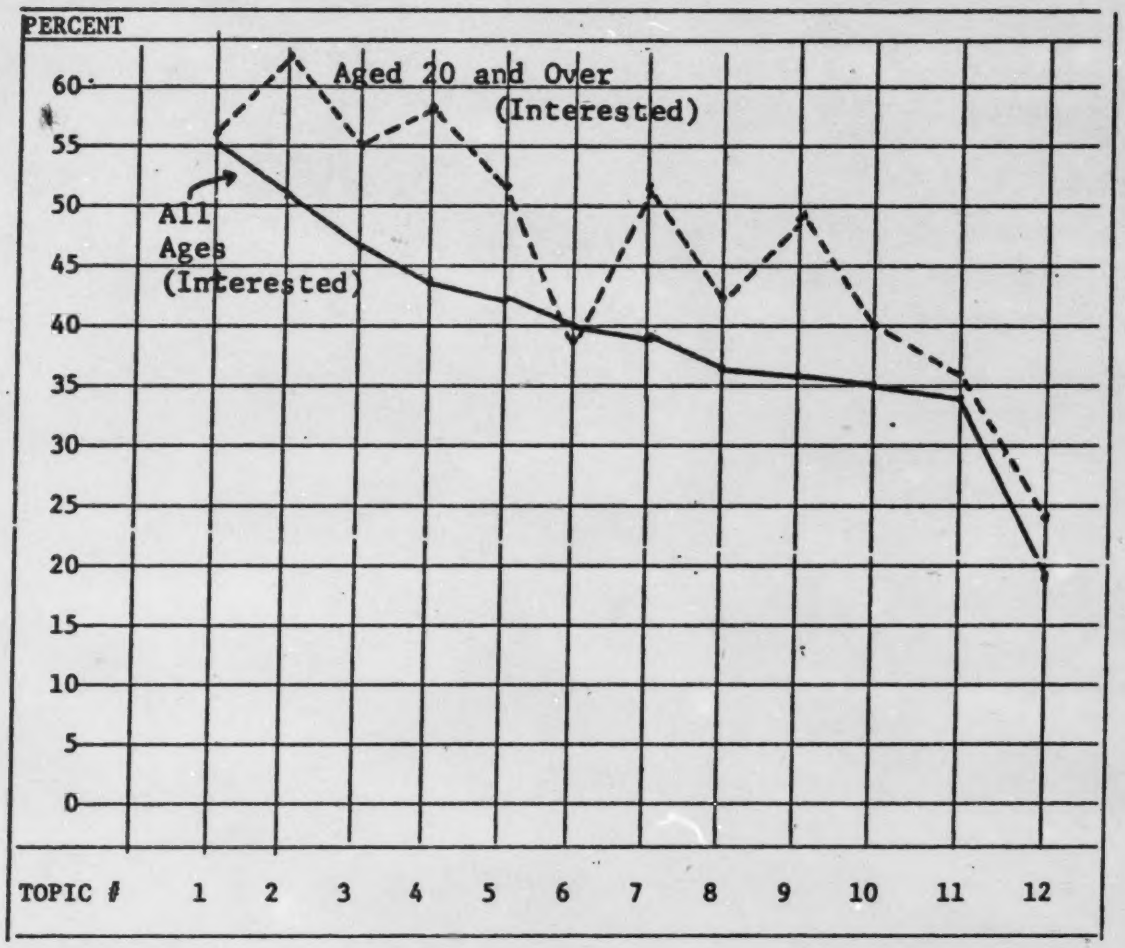
(Aged 20 and over)



TOPIC # 1: Physiological sexual stimulation and responsive behavioral differences in males and females
2: Physiological sexual development and maturation
3: Pregnancy and birth
4: Venereal disease
5: Sexual intercourse
6: Detailed presentation of reproductive system of human anatomy
7: Contraception
8: Heterosexuality
9: Female sterilization
10: Abortion
11: Male sterilization
12: Homosexuality

Figure 4

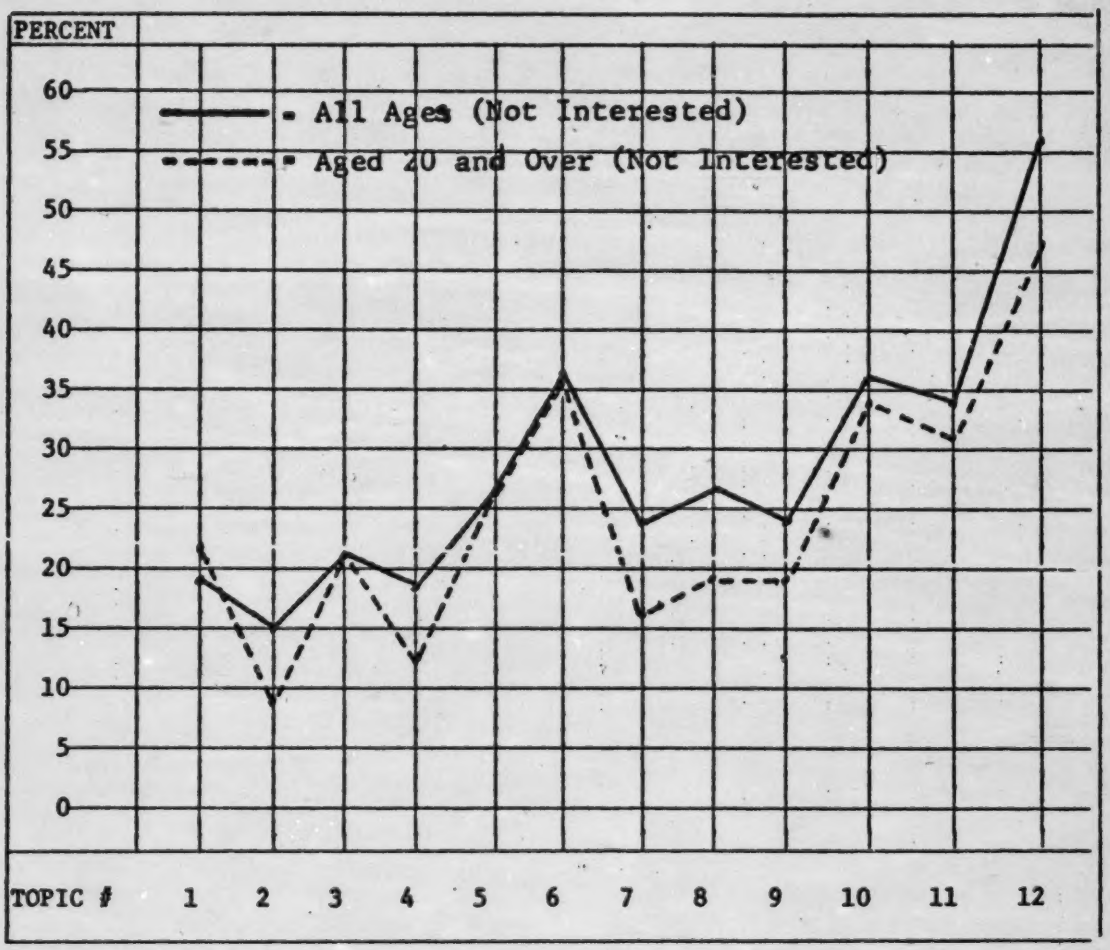
INCOMING CFCC FRESHMAN STUDENTS'
INTEREST IN
TWELVE SPECIFIC HUMAN SEXUALITY TOPICS
--A COMPARISON OF ALL AGE GROUPS
AND THOSE AGED 20 AND OVER



TOPIC # 1: Pregnancy and birth
2: Physiological sexual stimulation and responsive behavioral differences in males and females
3: Venereal disease
4: Physiological sexual development and maturation
5: Contraception
6: Abortion
7: Sexual Intercourse
8: Heterosexuality
9: Detailed presentation of reproductive system of human anatomy
10: Female sterilization
11: Male sterilization
12: Homosexuality

Figure 5

INCOMING CFCC FRESHMAN STUDENTS'
NON-INTEREST IN
TWELVE SPECIFIC HUMAN SEXUALITY TOPICS
--A COMPARISON OF ALL AGE GROUPS
AND THOSE AGED 20 AND OVER



TOPIC # 1: Pregnancy and birth
2: Physiological sexual stimulation and responsive behavioral differences in males and females
3: Venereal disease
4: Physiological sexual development and maturation
5: Contraception
6: Abortion
7: Sexual intercourse
8: Heterosexuality
9: Detailed presentation of reproductive system of human anatomy
10: Female sterilization
11: Male sterilization
12: Homosexuality

Table X represents the total sample of 344 students and shows percentage summaries of their evaluations of the quality of human sexuality instruction given them by three previous sources: parents, formal high school classroom instruction, and formal middle school or junior high school classroom instruction. Percentage figures for middle (#3) questionnaire responses were included for comparison purposes and as an aid in the interpretation of percentage totals even though these #3 responses were not considered for the research data.

Table X

INCOMING CFCC FRESHMAN STUDENTS' EVALUATIONS OF PREVIOUS HUMAN SEXUALITY INSTRUCTION GIVEN THEM BY THREE SOURCES

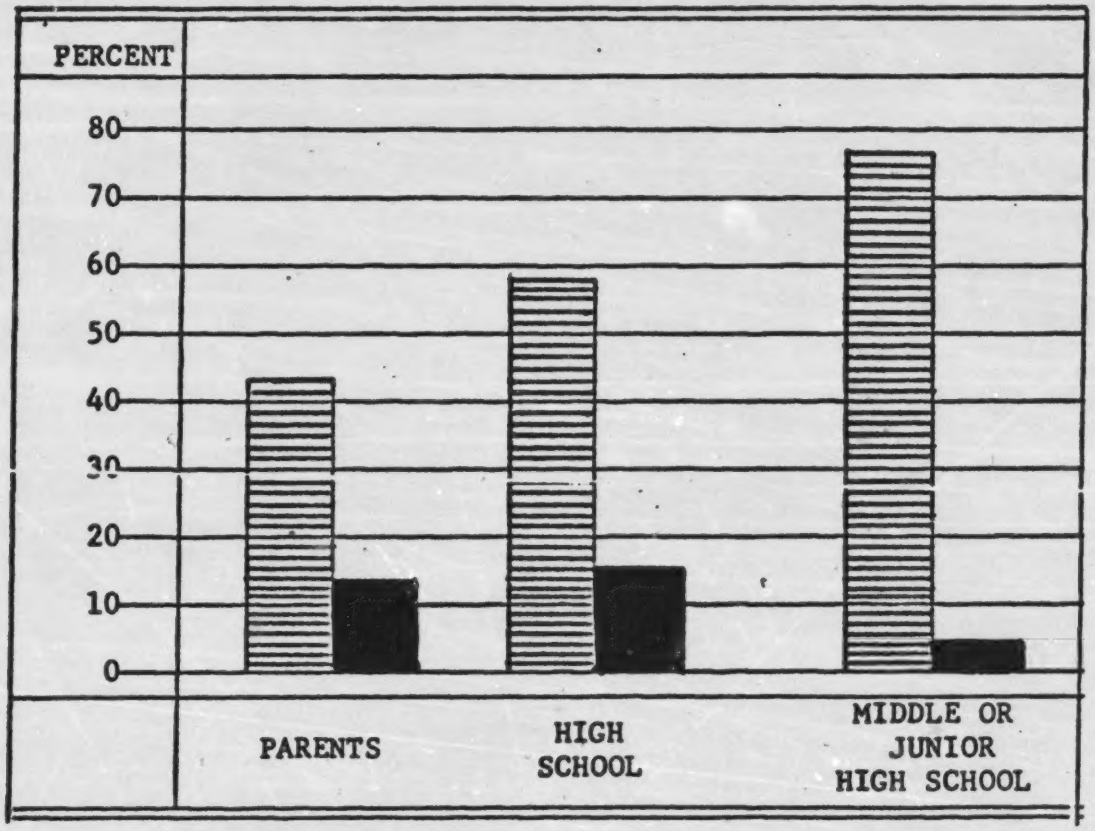
(All Ages Surveyed)
(n=344)

SOURCE	AVERAGE		BELOW AVERAGE-VERY INADEQUATE		ABOVE AVERAGE-EXCELLENT	
	n	Percent of Total	n	Percent of Total	n	Percent of Total
Parents	147	43%	151	44%	46	13%
Formal High School Classroom Instruction	92	27%	199	58%	53	15%
Formal Middle or Junior High School Classroom Instruction	69	20%	261	76%	14	4%

Figure 6 on page 56 presents the above information graphically.

Figure 6

INCOMING CFCC FRESHMAN STUDENTS'
EVALUATIONS OF PREVIOUS HUMAN SEXUALITY INSTRUCTION
GIVEN THEM BY THREE SOURCES



= Below Average/Very Inadequate

= Above Average/Excellent

CONCLUSIONS AND SIGNIFICANCE

Based on data obtained from this study of 344 incoming CFCC freshman students and from its sub-study of 88 incoming freshman students aged 20 and over, the following conclusions were drawn:

1. Central Florida Community College should offer a course in Human Sexuality. Students in both the total sample and the sub sample expressed interest in taking such a course, which proved significant at the .01 level.

2. In developing any course in Human Sexuality, CFCC should include considerable instruction in eight of the twelve human sexuality topics presented in the research questionnaire. These eight topics proved of significant interest to both the total sample and to the sub-sample and include (1) physiological sexual stimulation and responsive behavioral differences in males and females; (2) pregnancy and birth; (3) physiological sexual development and maturation; (4) venereal disease; (5) contraception; (6) sexual intercourse; (7) a detailed presentation of the reproductive system of the human anatomy; and (8) heterosexuality.

3. In developing any course in Human Sexuality, CFCC should not give consideration to extensive instruction in three

of the human sexuality topics presented in the research questionnaire: abortion, female sterilization, and male sterilization. Neither the total sample nor the sub-sample expressed significant interest in further study in these three topics.

4. In developing any course in Human Sexuality, CFCC should give thoughtful consideration to the fact that the human sexuality topic of homosexuality was rejected strongly by both the total sample and the sub-sample. Students not interested in information on this topic were significantly not interested in the topic at the .001 level in both the sample and the sub-sample.

5. In developing any course in Human Sexuality, CFCC should use as instructors persons who are known to be both knowledgeable in the particular topic being taught and <u>able to communicate this knowledge</u>. The sample evaluated previous instruction in human sexuality as "below average-very inadequate" significantly at the .001 level. This evaluation was given to each of the three previous sources in the questionnaire--parents, formal high school classroom instruction, and formal middle school or junior high school classroom instruction. A team of experts rather than a single instructor probably would result in a more meaningful overall learning experience. Vanderbilt University (Maxwell, 1972) used the team approach in its successful experimental course.

6. To meet differing needs of students in its community, CFCC should consider a variety of approaches to teaching human sexuality courses in both its credit and non-credit divisions. Examples of this includes the following:

(1) a credit course for students enrolled in degree-seeking programs;

(2) a non-credit or credit course for engaged or newly-married couples;

(3) a non-credit or credit course for parents, to aid them in their children's education in human sexuality;

(4) a non-credit or credit course designed primarily to give more adequate background to county high school and middle school teachers.

The rationale for such diverse approaches to the teaching of human sexuality includes the following:

(1) The percentage of the sub-sample of students aged 20 and over interested in taking a course in Human Sexuality was greater than the percentage of the total sample, which itself expressed significant interest.

(2) The percentage of the sub-sample not interested in such a course was lower than the percentage of the total sample.

(3) The percentage of the sub-sample interested in each of the twelve human sexuality topics presented in the questionnaire was higher in each case except one (abortion) than was the percentage of the total sample.

(4) The percentage of the sub-sample not interested in each of the twelve topics was lower in each case except one (pregnancy and birth) than was the percentage of the total sample.

(5) Evaluations of human sexuality information received from parents, high schools, and middle or junior high schools was "below average-very inadequate".

FURTHER STUDIES

Having completed the current study and having reviewed its data, recommendations for further studies are as follows:

1. Follow-up studies of expressed human sexuality needs of incoming CFCC freshman students should be made to validate further the results of the present study.

2. With the help of other community colleges, a similar study could be conducted on the campuses of other colleges of varying sizes and differing socio-economic areas to determine if the expressed needs and interests in human sexuality coursework of college freshman students at CFCC are typical of many such students.

3. Inasmuch as this study limited itself to physiological aspects of human sexuality, it is recommended that another study be done of students' needs in relationships, values, and decision making as they apply to one's human sexuality.

APPENDIX

CONTINGENCY TABLES OF OBSERVED AND EXPECTED FREQUENCIES FOR THE 29 NULL HYPOTHESES TESTED

H_o1

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	109	74	183
EXPECTED (f_e)	91.5	91.5	183

H_o2

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	39	17	56
EXPECTED (f_e)	28	28	56

H_o3

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	123	82	205
EXPECTED (f_e)	102.5	102.5	205

H_o4

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	150	62	212
EXPECTED (f_e)	106	106	212

H_o5

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	175	53	228
EXPECTED (f_e)	114	114	228

H_o6

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	134	83	217
EXPECTED (f_e)	108.5	108.5	217

H_o7

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	189	65	254
EXPECTED (f_e)	127	127	254

H_o8

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	147	93	240
EXPECTED (f_e)	120	120	240

H_o9

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	137	123	260
EXPECTED (f_e)	130	130	260

H_o10

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	119	125	244
EXPECTED (f_e)	122	122	244

H_o11

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	117	117	234
EXPECTED (f_e)	117	117	234

H_o12

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	127	93	220
EXPECTED (f_e)	110	110	220

CONTINGENCY TABLES OF
OBSERVED AND EXPECTED FREQUENCIES
FOR THE 29 NULL HYPOTHESES TESTED
PAGE THREE

H_o13

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	64	192	256
EXPECTED (f_e)	128	128	256

H_o14

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	160	72	232
EXPECTED (f_e)	116	116	232

H_o15

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	43	17	60
EXPECTED (f_e)	30	30	60

H_o16

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	51	11	62
EXPECTED (f_e)	31	31	62

H_o17

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	55	8	63
EXPECTED (f_e)	31.5	31.5	63

H_o18

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	46	14	60
EXPECTED (f_e)	30	30	60

CONTINGENCY TABLES OF
OBSERVED AND EXPECTED FREQUENCIES
FOR THE 29 NULL HYPOTHESES TESTED
PAGE FOUR

H_o19

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	49	19	68
EXPECTED (f_e)	34	34	68

H_o20

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	40	24	64
EXPECTED (f_e)	32	32	64

H_o21

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	34	32	66
EXPECTED (f_e)	33	33	66

H_o22

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	35	30	65
EXPECTED (f_e)	32.5	32.5	65

H_o23

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	32	27	59
EXPECTED (f_e)	29.5	29.5	59

H_o24

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	38	17	55
EXPECTED (f_e)	27.5	27.5	55

H_o25

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	21	42	63
EXPECTED (f_e)	31.5	31.5	63

H_o26

	INTERESTED	NOT INTERESTED	TOTAL
OBSERVED (f_o)	48	19	67
EXPECTED (f_e)	33.5	33.5	67

H_o27

	BELOW AVERAGE-VERY INADEQUATE	ABOVE AVERAGE-EXCELLENT	TOTAL
OBSERVED (f_o)	151	46	197
EXPECTED (f_e)	98.5	98.5	197

H_o28

	BELOW AVERAGE-VERY INADEQUATE	ABOVE AVERAGE-EXCELLENT	TOTAL
OBSERVED (f_o)	199	53	252
EXPECTED (f_e)	126	126	252

H_o29

	BELOW AVERAGE-VERY INADEQUATE	ABOVE AVERAGE-EXCELLENT	TOTAL
OBSERVED (f_o)	261	14	275
EXPECTED (f_e)	137.5	137.5	275

CALCULATION OF CHI SQUARE
FOR THE 29 NULL HYPOTHESES TESTED

Cell	Observed Frequencies f_o	Expected Frequencies f_e	$f_o - f_e$	$(f_o - f_e)^2$	$\frac{(f_o - f_e)^2}{f_e}$	x^2
H_o1						
Interested	109	91.5	17.5	306.25	3.35	
Not Interested	74	91.5	-17.5	306.25	3.35	
						6.70
H_o2						
Interested	39	28	11	121	4.32	
Not Interested	17	28	-11	121	4.32	
						8.64
H_o3						
Interested	123	102.5	20.5	420.25	4.1	
Not Interested	82	102.5	-20.5	420.25	4.1	
						8.2
H_o4						
Interested	150	106	44	1936.00	18.26	
Not Interested	62	106	-44	1936.00	18.26	
						36.52
H_o5						
Interested	175	114	61	3721.00	32.64	
Not Interested	53	114	-61	3721.00	32.64	
						65.28
H_o6						
Interested	134	108.5	25.5	650.25	5.99	
Not Interested	83	108.5	-25.5	650.25	5.99	
						11.98
H_o7						
[illegible]sted	[illegible]	[illegible]	62	3844.00	30.27	
Not Interested	65	127	-62	3844.00	30.27	
						60.54

CALCULATION OF CHI SQUARE
FOR THE 29 HYPOTHESES TESTED
PAGE TWO

Cell	Observed Frequencies f_o	Expected Frequencies f_e	$f_o - f_e$	$(f_o - f_e)^2$	$\frac{(f_o - f_e)^2}{f_e}$	x^2=
$H_o 8$						
Interested	147	120	27	729	6.08	
Not Interested	93	120	-27	729	6.08	
						12.16
$H_o 9$						
Interested	137	130	7	49	0.38	
Not Interested	123	130	-7	49	0.38	
						0.76
$H_o 10$						
Interested	119	122	-3	9	0.07	
Not Interested	125	122	3	9	0.07	
						0.14
$H_o 11$						
Interested	117	117	0	0	0.00	
Not Interested	117	117	0	0	0.00	
						0.00
$H_o 12$						
Interested	127	110	17	289	2.63	
Not Interested	93	110	-17	289	2.63	
						5.26
$H_o 13$						
Interested	64	128	-64	4096	32.00	
Not Interested	192	128	64	4096	32.00	
						64.00
$H_o 14$						
Interested	160	116	44	1936	16.69	
Not Interested	72	116	-44	1936	16.69	
						33.38

CALCULATION OF CHI SQUARE
FOR THE 29 HYPOTHESES TESTED
PAGE THREE

Cell	Observed Frequencies f_o	Expected Frequencies f_e	$f_o - f_e$	$(f_o - f_e)^2$	$\frac{(f_o - f_e)^2}{f_e}$	$x^2 =$
H_o15						
Interested	43	30	13	169	5.63	
Not Interested	17	30	-13	169	5.63	
						11.26
H_o16						
Interested	51	31	20	400	12.9	
Not Interested	11	31	-20	400	12.9	
						25.8
H_o17						
Interested	55	31.5	23.5	552.25	17.53	
Not Interested	8	31.5	-23.5	552.25	17.53	
						35.06
H_o18						
Interested	46	30	16	256	8.53	
Not Interested	14	30	-16	256	8.53	
						17.06
H_o19						
Interested	49	34	15	225	6.62	
Not Interested	19	34	-15	225	6.62	
						13.24
H_o20						
Interested	40	32	8	64	2.0	
Not Interested	24	32	-8	64	2.0	
						4.0
H_o21						
Interested	35	32.5	2.5	6.25	0.19	
Not Interested	30	32.5	-2.5	6.25	0.19	
						0.38

CALCULATION OF CHI SQUARE
FOR THE 29 HYPOTHESES TESTED
PAGE FOUR

Cell	Observed Frequencies f_o	Expected Frequencies f_e	$f_o - f_e$	$(f_o - f_e)^2$	$\frac{(f_o - f_e)^2}{f_e}$	$x^2 =$
$H_o 22$						
Interested	35	32.5	2.5	6.25	0.19	
Not Interested	30	32.5	-2.5	6.25	0.19	
						0.38
$H_o 23$						
Interested	32	29.5	2.5	6.25	0.21	
Not Interested	27	29.5	-2.5	6.25	0.21	
						0.42
$H_o 24$						
Interested	38	27.5	10.5	110.25	4.01	
Not Interested	17	27.5	-10.5	110.25	4.01	
						8.02
$H_o 25$						
Interested	21	31.5	-10.5	110.25	3.5	
Not Interested	42	31.5	10.5	110.25	3.5	
						7.0
$H_o 26$						
Interested	48	33.5	14.5	210.25	6.28	
Not Interested	19	33.5	-14.5	210.25	6.28	
						12.56
$H_o 27$						
Below Average-Very Inadequate	151	98.5	52.5	2756.25	27.98	
Above Average-Excellent	46	98.5	-52.5	2756.25	27.98	
						55.96

CALCULATION OF CHI SQUARE
FOR THE 29 HYPOTHESES TESTED
PAGE FIVE

Cell	Observed Frequencies f_o	Expected Frequencies f_e	$f_o - f_e$	$(f_o - f_e)^2$	$\frac{(f_o - f_e)^2}{f_e}$	$x^2 =$
$H_o 28$						
Below Average-Very Inadequate	199	126	73	5329	42.29	
Above Average-Excellent	53	126	-73	5329	42.29	84.58
[redacted]9						
Below Average-Very Inadequate	261	137.5	123.5	15,252.25	110.93	
Above Average-Excellent	14	137.5	123.5	15,252.25	110.93	221.86

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